Marks, Williamson and Quaine, Rissel, and Haas describe specific uses of data from the Program for monitoring the prevalence and management of asthma and diabetes, local planning and program evaluation, and economic analysis. Quaine et al. examine the use made of data from area health service-specific questions included in the Program, and relationships between the process of survey question development, the extent of analysis, and use of the results.

Three papers focus on survey processes. Baker describes the methods—unique to the Program—used to translate the survey questionnaires into non-English languages. Gorringe and Latham provide a “hands on” perspective on managing telephone survey fieldwork, and maximising its quality. Eyeson-Annan describes mooted changes to the Program, which will evolve to a continuous all-ages data collection from January 2002.

Finally, Atyeo and Rawson provide a national context. They describe the series of health surveys conducted by the Australian Bureau of Statistics, and changes to the composition and frequency of their survey program arising from a recent review.

The articles in this edition of NSW Public Health Bulletin emphasise the quality of the work done by the NSW Health Survey Program, and its key role in informing population health activity in NSW. The Program will face several challenges as it evolves, including increasing use of mobile phones (in 2000, 58.5 per cent of Australian households had at least one mobile phone) and answering machines, portability of phone numbers, and possibly reduced public cooperation related to increasing telemarketing activity. Building an even better information base for population health in NSW will require the development of new health survey methodologies, and strategies to nurture public support.

REFERENCES
This article reports the methods and findings of this survey of stakeholders and users.

**METHODS**

**Sample**
The purpose of the survey was to collect information about as many users and uses of the NSW HSP as possible. Accordingly, a non-probability ‘snowball’ sampling method was used, with three main target groups:

- key staff within the NSW Department of Health who were known to have used data from the HSP;
- potential and actual users of the HSP, compiled from lists of members of relevant committees and other groups, including: NSW Health Survey Program Steering Committee; NSW Health Survey Technical Working Group; NSW Health Survey Methodology Working Group; NSW Child Health Survey Technical Expert Group; NSW Older Peoples Survey Technical Advisory Group; Chief Executive Officers of NSW Area Health Services; National Computer Assisted Telephone Interviewing Technical Reference Group (CA TI-TRG); NSW Epidemiology Special Interest Group (Epi-SIG); and NSW Health Promotion Research and Evaluation Coordinators;
- other possible users of the HSP suggested by users from the previous two groups.

**Survey Instrument**
Key informants from the NSW Department of Health were surveyed using unstructured face-to-face interviews.

Other potential users of the HSP were surveyed using a brief questionnaire consisting of seven questions. The questions addressed method of access to the survey data (unit record and/or summary information), types of uses of survey data, and topic areas of the data used. The survey also included questions seeking information on other known users of the survey data, and suggested improvements to the HSP.

**Data Collection**
The questionnaire was sent to potential users of the HSP by email. Hard copies were distributed at a meeting of the NSW Epidemiology Special Interest Group.

Completed surveys were returned by email, fax, or post. Completed surveys were entered into a database for analysis.

**RESULTS**

**Respondents**
Of the 230 questionnaires distributed (217 initially and 13 as a result of information from other recipients), 35 were returned by respondents who had used HSP data.

The respondents included health service managers, epidemiologists, project officers, consultants, research officers and health promotion officers. The data had been used within the NSW Department of Health, and by area health services, research institutions and universities, other government departments, specialist health services and private consultants.
TABLE 1
ACCESS TO NSW HEALTH SURVEY PROGRAM DATA [N=116]

<table>
<thead>
<tr>
<th>Type of data</th>
<th>Accessed Information</th>
<th>Number</th>
<th>(Percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit record data</td>
<td>HOIST</td>
<td>14</td>
<td>(40%)</td>
</tr>
<tr>
<td></td>
<td>Request for unit record data</td>
<td>2</td>
<td>(6%)</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>0</td>
<td>(0%)</td>
</tr>
<tr>
<td>Summary Information</td>
<td>Printed Chief Health Officers Report</td>
<td>18</td>
<td>(51%)</td>
</tr>
<tr>
<td></td>
<td>Printed Older Peoples Report</td>
<td>9</td>
<td>(26%)</td>
</tr>
<tr>
<td></td>
<td>Internet Reports</td>
<td>14</td>
<td>(40%)</td>
</tr>
<tr>
<td></td>
<td>Intranet Reports</td>
<td>14</td>
<td>(40%)</td>
</tr>
<tr>
<td></td>
<td>Request for Summary tables</td>
<td>0</td>
<td>(0%)</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>4</td>
<td>(11%)</td>
</tr>
</tbody>
</table>

TABLE 2
SUGGESTIONS FOR IMPROVEMENTS TO THE NSW HEALTH SURVEY PROGRAM

<table>
<thead>
<tr>
<th>Area</th>
<th>Comments and Suggestions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sampling</td>
<td>larger rural sample</td>
</tr>
<tr>
<td>Questionnaire Development</td>
<td>review of instrument by experts</td>
</tr>
<tr>
<td></td>
<td>standardisation of questions with other data sources</td>
</tr>
<tr>
<td></td>
<td>having consistent questions between years</td>
</tr>
<tr>
<td>Analysis</td>
<td>more cleaning of survey dataset on HOIST *</td>
</tr>
<tr>
<td></td>
<td>access to a program to convert character data to numeric data</td>
</tr>
<tr>
<td>Reporting</td>
<td>separate reports for each year</td>
</tr>
<tr>
<td></td>
<td>specific topic area reports, which may also incorporate other data sources</td>
</tr>
<tr>
<td></td>
<td>breakdown by local government area</td>
</tr>
<tr>
<td></td>
<td>provision of actual counts, sample number and response rate</td>
</tr>
<tr>
<td></td>
<td>more interpretation of results</td>
</tr>
<tr>
<td>Marketing</td>
<td>more information on how to access survey results</td>
</tr>
<tr>
<td></td>
<td>more information on how to access HOIST * and better understanding of how HOIST* works</td>
</tr>
</tbody>
</table>

* The NSW Department of Health’s Health Outcomes Information Statistical Toolkit (HOIST).

FIGURE 2
TOPIC AREAS OF USE OF THE NSW HEALTH SURVEY PROGRAM INFORMATION

- Injury
- Health behaviours
- Breast and cervical cancer screening
- Asthma
- Access to and satisfaction with health services
- Vaccination status
- Sun protection or shade policy
- Attitudes to smoking and public places
- High blood pressure, cholesterol and heart condition
- Other
- Smoking rates
- Physical activity
- Persistent pain
- Oral health
- Alcohol
- Screening for colorectal cancer

Percentage of uses
Access to the data

Data is available as summary information (that is, as aggregated data such as that presented in the Electronic Reports of the NSW Health Surveys, the *Health of the People of NSW—Report of the Chief Health Officer 2000*, or the *NSW Older People’s Health Survey 1999*) or as individual unit record data, such as that found in datasets in the NSW Department of Health’s Health Outcomes Information Statistical Toolkit (HOIST). Most respondents to the questionnaire (87 per cent) had accessed summary information, while less than half (43 per cent) had accessed unit record data either from HOIST or from special requests for data from the HSP.

Eighteen of the questionnaire respondents (51 per cent) had accessed summary information in the hard copy of *The Health of the People of NSW—Report of the Chief Health Officer 2000*, while nine (26 per cent) had used the hard copy report *NSW Older People’s Health Survey 1999*. Just under half of respondents reported that they had accessed summary information electronically via the NSW Department of Health’s Intranet (14, or 40 per cent), and a similar number reported accessing it via the Internet (14, or 40 per cent) (Table 1).

Of those accessing unit record data, almost all (14) reported that they obtained the data via the NSW Department of Health’s Health Outcomes Information Statistical Toolkit (HOIST) facility, while only two respondents had obtained it via a special request to the Epidemiology and Surveillance Branch.

USES OF NSW HEALTH SURVEY PROGRAM DATA AND INFORMATION

The survey identified 116 separate examples of uses of the information from the HSP, covering a wide variety of purposes (Figure 1) and a wide range of topic areas (Figure 2).

HSP data has been used to fulfil State and Commonwealth reporting requirements, including reports to the Commonwealth on National Aboriginal Health Indicators, influenza immunisation rates for Immunise Australia, and indicators of satisfaction with health services for the Commonwealth Productivity Commission, and reports to the NSW Council on the Cost of Government, NSW Budget Estimates Committee, and NSW Treasury. The data have also been used to produce NSW Area Health Service Health Status Profiles, which support performance management within NSW Health.

HSP data have contributed to a range of monographs and reports, including:

- 1997 NSW Health Survey.
- *NSW Health Surveys 1997 and 1998*.
- *NSW Older People’s Health Survey 1999*.
- *Cancer in the Bush*.
- *Down River—Needs assessment of Lower Clarence*.
- *NSW Older People’s Health Survey, 1999—Comparison between results for Mid-Western Area Health Service and NSW*.
- *Healthy Northern Rivers 2002—Northern Rivers Area Health Profile*.
- reports for cancer and respiratory diseases.

The HSP has provided information to support planning, policy and strategy development, including strategies for public health in NSW (such as *Healthy People 2005*), alcohol harm, and men’s health, and campaigns for pneumococcal immunisation, influenza immunisation, physical activity (Active Australia), sun safety, and injury prevention.
Utilities of the HSP to evaluate policies and programs include evaluation of use of asthma ‘preventer’ medications, trends in physical activity, influenza immunisation campaigns, and cervical cancer screening. HSP data have been used to produce a range of publications in peer-reviewed journals, including papers on chronic pain, use of self-report to monitor overweight and obesity, cervical screening, use of asthma ‘preventer’ medications and written management plans, health inequalities, risk factors that can be modified to prevent cancer, informal caring, factors associated with smoke-free homes, and urinary symptoms and incontinence.

The data have contributed to conference presentations on topics including prevalence and management of diabetes, prevalence of chronic pain and its interference with daily activities, measuring quality of life using the EQ-5D instrument, and alcohol harm.

Uses of the HSP by type of user and by topic area are summarised in the matrices presented as Figures 3 and 4.

**Suggestions for improvement**

Twenty-eight (80 per cent) respondents to the survey questionnaire provided suggestions for improvements to the HSP. These fell into five broad categories: sampling, questionnaire development, analysis, reporting, and marketing (Table 2).

**DISCUSSION**

State health departments around Australia, and overseas, are conducting regular population telephone surveys to address their requirements for population health information. Examples include:

- United States Behavioural Risk Factor Surveillance System (BRFSS)
- California CATI (Computer Assisted Telephone Interview)
- Hawaii Health Survey
- South Australian Social, Environmental and Risk Context Information System (SERCIS)
Our survey identified a wide range of uses of NSW Health Survey Program data. Encouragingly, the most frequently reported use was to provide information to support planning and strategy development, and to change policy or practice. Remmington et al. and Figgs et al. examined uses of the BRFSS by identifying publications using BRFSS data in each of the contributing states, and through questionnaires completed by the state BRFSS managers. 50,51 The main uses they identified—support for state and local health policy and planning of interventions—were similar to those found in our survey.

Barriers to use of health survey data identified in our study were similar to those found by others. Spencer et al. reported that collaboration between data creators and users was important for addressing information needs for health policy, and for prioritising these needs. 52 Bloom et al. undertook focus groups with BRFSS users, and identified barriers including lack of knowledge regarding availability of the survey data and the need for larger sample sizes to examine smaller areas. 53

With a move to reorient the NSW HSP to a continuous data collection from the beginning of 2002 (see the article on page 235 of this edition of the Bulletin), the information collected through the user survey, and through ongoing user feedback, will be used to refine topic and question content. It will also assist in developing mechanisms to improve the program, and to maximise the use made of its products. Figgs et al. reported an increase in the use of BRFSS data from the 1980s to the 1990s. 54 It is anticipated that the uses made of NSW HSP data will increase in a similar way as the program evolves and matures.

When planning the survey of users, we thought that many of the uses of data from the NSW HSP would be known to us. However, this was not the case, with around half of the projects we identified as being new to us. The survey was thus an important step in measuring and documenting the value of the Program. The projects that were identified have been included on a register. Any other users of the NSW HSP are encouraged to send us information about their projects so that they can be added.

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